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APPLICATION NO.	FI	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/938,870	08/23/2001		Tony F. Rodriguez	P0392	1150
23735	7590	12/16/2004		EXAMINER	
DIGIMARO 9405 SW GE			BROWN, CHRISTOPHER J		
BEAVERTON, OR 97008				ART UNIT	PAPER NUMBER
				2134	2134

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No. Applicant(s)				
		09/938,870	RODRIGUEZ ET AL.			
	Office Action Summary	Examiner	Art Unit			
		Christopher J Brown	2134			
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	orrespondence address			
THE   - External after   - If the   - If NC   - Failu   Any	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period or to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tim  y within the statutory minimum of thirty (30) days  will apply and will expire SIX (6) MONTHS from  cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status			1			
1)	Responsive to communication(s) filed on 02 Ja	anuary 2002.				
2a) <u> </u>		action is non-final.				
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Dispositi	on of Claims					
5) <u></u> 6)⊠	Claim(s) 1-17 is/are pending in the application.  4a) Of the above claim(s) is/are withdray Claim(s) is/are allowed.  Claim(s) 1-17 is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction and/o	vn from consideration.				
Applicati	on Papers					
10)⊠	The specification is objected to by the Examine The drawing(s) filed on 23 August 2001 is/are: Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex	a) accepted or b) objected of drawing(s) be held in abeyance. See ion is required if the drawing(s) is object.	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority ι	inder 35 U.S.C. § 119					
12)[ a)	Acknowledgment is made of a claim for foreign All b) Some * c) None of:  1. Certified copies of the priority document:  2. Certified copies of the priority document:  3. Copies of the certified copies of the priority document:  application from the International Bureau  See the attached detailed Office action for a list	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage			
		*				
Attachmen		A) 🗍 Interview 0	(DTO 442)			
2) Notice (3) Information	e of References Cited (PTO-892) se of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:				

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 4, 5, 6, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang US 6,263,086 in view of Adler US 6,275,599.

As per claims 1, 4, 5, 6, and 8, Wang teaches embedding an invisible watermark in a halftone screen structure. (Col 1 lines 49-53, Col 2 lines 1-5). Wang does not teach errors when the screen in reproduced.

Adler teaches use of a fragile watermark for which any tampering of the image is detected through errors produced in the watermark (Col 2 lines 30-35).

It would have been obvious to one of ordinary skill in the art to include a fragile watermark with the image of Adler in order to copy protect the document.

As per claim 6, and 8 Adler teaches using the errors of the fragile watermark to detect reproduction, (Col 2 lines 30-35).

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang US 6,263,086 in view of Adler US 6,275,599 in view of Cox US 5,930,369.

As per claim 2, the previous Wang-Adler combination does not disclose including spread spectrum modulation.

Cox teaches using spread spectrum modulation, (Col 6 lines 12-26).

It would have been obvious to one of ordinary skill in the art to use the spread spectrum modulation of Cox with the watermark system of the Wang-Adler combination because spreading the watermark throughout the spectrum ensures a large measure of security against attacks, (Col 6 lines 39-45)

Claims 3, 7, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang US 6,263,086 in view of Adler US 6,275,599 in view of Brundage US 2002/016992

As per claim 7, the previous Wang-Adler combination does not disclose watermark alignment.

Brundage teaches using watermark data to align an optical scanner, [0007].

It would have been obvious to one of ordinary skill in the art to use the orientation data of Brundage with the watermark system of Wang- because it allows the scanner to align itself without user interference.

As per claims 3, 10, and 11, the previous Wang-Adler combination does not disclose a payload.

Brundage teaches that a watermark may carry a payload with any type of data.

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Claims 9, 12, 14, 16, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang US 6,263,086 in view of Adler US 6,275,599 in view of Cookson US 6,591,365.

As per claims 9, 12, 16, and 17 the previous Wang-Adler combination does not teach a first and second watermark.

Cookson teaches using both a robust watermark, and a fragile watermark, and compare them to determine if the media has been copied or tampered with, (Claim 19).

It would have been obvious to one of ordinary skill in the art to use the robust and fragile watermark of Cookson, with the system of Wang-Adler so that a payload could be maintained, and media copying or tampering could be detected.

As per claim 14 Wang-Adler teach that the digital watermark is invisible, (Wang Col 1 lines 49-53).

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang US 6,263,086 in view of Adler US 6,275,599 in view of Cookson US 6,591,365 in view of Brundage US 2002/016992

As per claim 15, The previous combination of Wang-Adler-Cookson does not teach alignment.

Brundage teaches using watermark data to align an optical scanner, [0007].

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It would have been obvious to one of ordinary skill in the art to use the orientation data of Brundage with the watermark system of Wang-Adler-Cookson because it allows the scanner to align itself without user interference.

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Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang US 6,263,086 in view of Adler US 6,275,599 in view of Cookson US 6,591,365 in view of Crane US 4,552,617

As per claim 13, The previous combination of Wang-Adler-Cookson does not teach varying the topology of a document.

Crane teaches a watermark producing method that varies the topology of a watermark, (Col 3 line 67- Col 4 line 8).

It would have been obvious to one of ordinary skill in the art to modify the Wang-Adler-Cookson combination with Crane's varying topology because the process increases the security of the watermark.

## Conclusion

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher J Brown whose telephone number is (571)272-3833. The examiner can normally be reached on 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on (571)272-3838. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For

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have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

Christopher J. Brown

12/10/04

GREGORY MORSE
PERVISORY PATENT EXAM

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TECHNOLOGY CENT